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NAVAL SUPPLY SYSTEMS COMMAND

Executive Overview

EX-201

Ready. Resourceful. Responsive!

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NAVAL SUPPLY SYSTEMS COMMAND HEADQUARTERS

Agenda

- Course Mission Statement
- ERP Overview
- Major Terms & Concepts
- SMART Integrated Scenarios
- SAP Repair Cycle Demonstration

Course Mission Statement

To provide the tools to understand ERP and its impacts to the Navy and to demonstrate a real-world scenario of the Navy's use of ERP. In other words:

"To know the right questions to ask and to understand the answers given."

ERP Overview

ERP Overview Outline

- Why ERP?
- What's our approach?
- What investment is required?
- What will it buy the Navy?

Why ERP?

- ERP is NOT about IT or software!
- ERP is about how business is done
  - *Reengineer business processes*
  - *Establish common data and practices*
  - *Establish Single Entry – Single Source*
  - *Reduce number of applications*
  - *Establish End-to-End process connectivity*
  - *Comply with Federal financial standards*
  - *Enable effective implementation of Activity Based Costing (ABC)*

Relationship to Existing Systems

- Provides backbone to leverage best commercial business practices
- Replaces legacy systems requiring upgrades
- Capitalizes on Navy, Other Services, and DOD Investments
- Provides the means to achieve common ashore / afloat processes
- Enhances speed and accuracy in decision making
- Enables *e*Business extensions

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A Response to a Current Theme..

Disparate databases

Suspect data integrity

Financial, maintenance, and supply data not linked

Multiple sources of data means multiple answers to a single question

Result … months to answer a question and conflicting answers

From FHP CEB III
16 November 2000

AVDLR Cost Growth…Why so hard to answer?

Disparate data bases, suspect data integrity, insufficient granularity

Symptom	*Cause*	*Data Sources*
INCREASED CONSUMPTION	Aging components?	AV3M/ICP/AIR 4.0/NADEPs
	Declining component reliability?	AV3M/ICP/AIR 4.0/NADEPs
	Bulletins?	Program Mgr/ICP/TYCOMs
	O & I level skill & manning?	AMSR Top Level Metrics/TYCOMs
	Parts availability?	DLA/ICP/TYCOMs/O&I Level
	ILS disconnects?	Program Mgr/TYCOMs/ICP
	PRE/PRL shortfalls?	AIR3.0/Program Mgr/TYCOMS
	FHP execution?	TYCOMS/NAVCOMPT/ICP
INCREASED COST	Maint. philosophy change?	Program Mgr/ICP
	Depth of repair increase?	AIR 6.0 NADEPS/Com'l contractor
	Matl usage/cost growth?	NADEPs/Com'l contractor/ICP
	New product mix?	Program Mgr/TYCOMs/ICP
	Obsolescence?	AIR4.0/NADEPs/ICP/DLA
	Overhead fluctuation?	ICP/DLA/NADEP
	FHP execution?	TYCOMS/NAVCOMPT/ICP

Financial, Maintenance and Supply Data…NO LINK

What Is Our Approach?

Joint Vision 2020

Revolution in Business Affairs

Commercial Best Practices ESG

- **Aviation Supply/ Maintenance (SUP/AIR)**
- **Program Management (AIR)**
- **Regional Maintenance (SEA/CLF)**
- **Navy Working Capital Fund (SPAWAR)**

Give priority to investments that will cut our operating or business costs, such as Enterprise Resource Planning (ERP) and the Navy-Marine Corps Intranet (NMCI).

- **DLA Business System Modernization**
- **Army Material Command Logistics Modernization**
- **Military Sealift Command**

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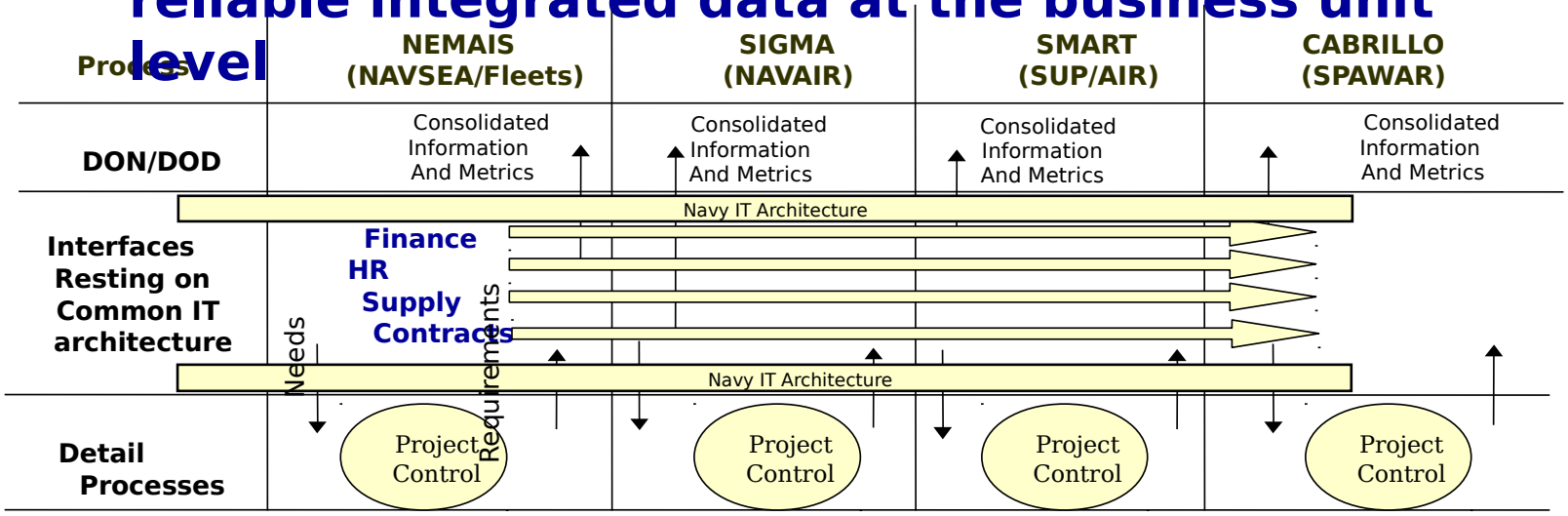
From Pilots to Enterprise

- The ERP programs drive efficiencies and data visibility at the individual business level
- Common functions (finance, maintenance, contracting, & supply) guarantee ability to roll-up data across Navy Enterprise
- ERP data is the means to provide useful metrics at the highest levels in real time based on reliable integrated data at the business unit level



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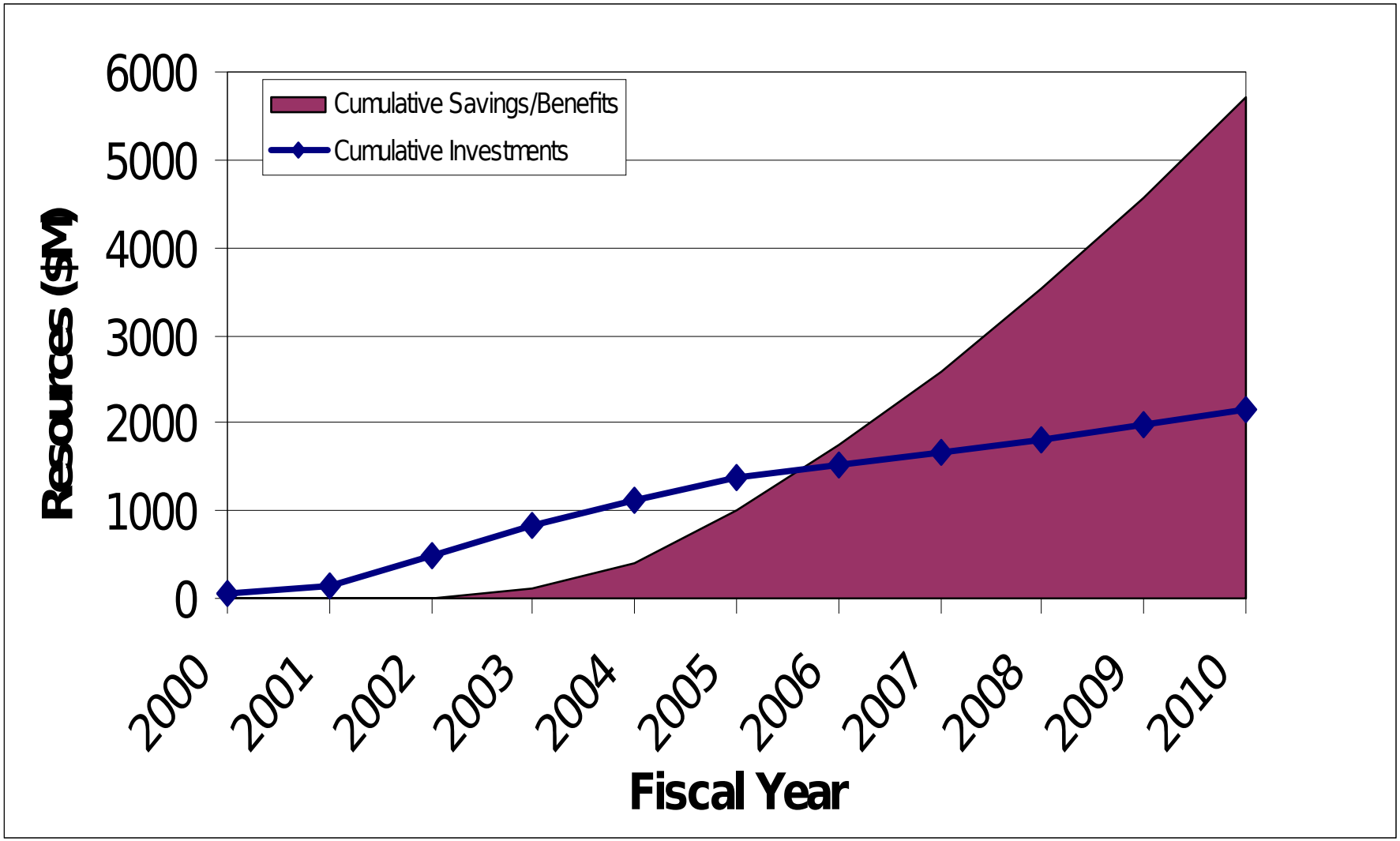
What Investment Is Required?



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What Will This Buy the Fleet?

More product per dollar for the Fle

SPAWAR FINANCIALS IMPLEMENTED JULY 2, 2001

Prior to ERP:

- 59 Internal systems
- 44 Internal Interfaces
- >20 separate databases
- O&M costs $8.5M
- Batch accounting (High latency 1-3 weeks delay)
- Poor management reporting
- >80 Manual on-line Financial transactions (labor intensive)
- Multiple data inputs resulting in keypunch errors
- No ability to capture business or program costs

Under ERP:

- 75% reduction in IT applications and support
- O&M savings of $4.8M
- Reduction of 15.2 work years
- Real time accounting
- Tailored Mgt. reporting
- Automated financial transactions/ paperless work flow
- Data entered once
- Ability to capture costs (WBS, ABC/M, TOC, etc.)
- 2-3X speed increase in supply / financial processes

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Fleet Readiness (Aircraft Grounding Bulletin)

SITSUM: An F-14 tail hook from production lot 6453 fails prematurel

NAVAIR recommends REDSTRIPE … Ground all aircraft for inspectio

Currently:

- NAVAIR releases grounding bulletin to entire fleet
- Requires inspection of every tail hook
- For 123 F-14s, remove, inspect and return to aircraft or BCM
- Inspect all tail hook inventories afloat and ashore, maintenance and supply
- All tail hooks are sent over time to NADEP for inspection
- Tail hooks are scheduled into NADEP as they are received
- Result, 123 F-14s grounded until inspection complete

Under ERP:

- NAVAIR queries the enterprise database … locates all lot 6453 assets
- NAVAIR releases grounding bulletins real-time for 6 aircraft by tail number
- Uninstalled equipment records are red flagged in the enterprise database by serial number
- E-mails sent to selected supply & maintenance personnel afloat & ashore
- Affected tail hooks are “advance scheduled” for inspection at the NADEP
- Result, 6 F-14s grounded until inspection complete

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Capabilities Enabled by ERP

- Ability to make decisions with more speed and accuracy
- Ability to streamline and integrate Navy core business functions and processes
- Ability to Align DoN claimants to better support Navy goals using common processes and data
- Ability to more effectively tie Maintenance and Support Budgets to Fleet metrics
- Ability to provide insight into Program Execution for plan costs and total ownership costs using ABC/M, EVM, TOC

Major Terms & Concepts

Master Data

Consistent and common data elements stored in tables that are necessary to process transactions across all modules of SAP.

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SAP to Navy

- **Vendor Master Record = Information about suppliers: address, CAGE. Data from the Central Contractor Registration [CCR]**
- **Material Master Record = Selected Item Record Info from weapons system file [NIIN, CAGE, Part Number]**
- **Equipment Master Record = Selected Item Record Info by Serial Number**
- **Customer Master Record = UIC [Address, Payment and Order data]**

Hierarchies

Structures of master data ordered to reflect organizational requirements for posting and reporting.

SAP to Navy

- Company Code = Legal entity based on fund type [NAVSUP Working Capital Supply Management (3200)]
- Plant = Organization Code = Physical area where inventory is held or processed [AIMD in NALCOMIS is A9B = DH01 in SAP]
- Cost Center = Component of Cost Code Structure [7PP1000FAPRA] *Not a Direct Mapping* - Used in ABC/M to collect and assign expenses

SAP to Navy

- **Storage Location = Purpose Code [A,W,L and building # for physical location]**
- **Functional Area = Weapons System [E2C2] or area within weapons system [E2C2 Landing Gear]**
- **Sales Organization = Company Code [NAVSUP Working Capital (3200)]**

SAP to Navy

- Division = Organizational Code [Aviation Repairable, Aviation Consumable, Maritime Repairable, Maritime Consumable, Non-Navy Consumable]

- Functional Location = No current Navy Equivalent. For pilot, mapped to actual location of work center where equipment is installed [RADCOM Test Bench]

SAP to Navy

- Purchasing Organization = Navy Activity [NAVICP-PHIL/MECH]
- Purchase Groups = Contract Specialists [grouped by IWST]
- Maintenance Order = Maintenance Action Form [MAF]

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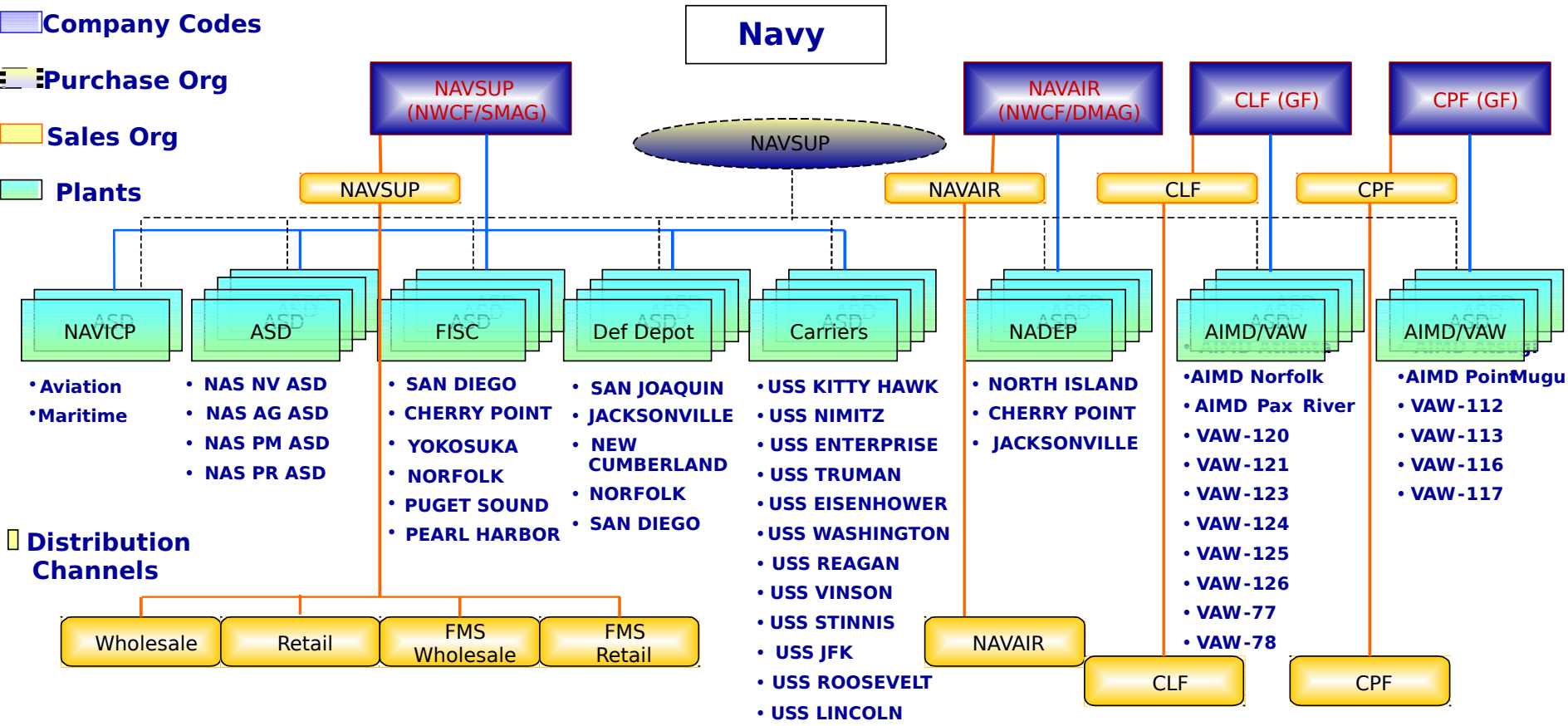
SMART SAP Business Architecture

Financial hierarchy is consistent with FMO standards
Plant structure supports material ownership and stocking points



- *Vendor stock category – C& O repair (ExLockhead and Northrop Grummon)*
- *Chartered outsourced warehouse – stock NWCF materials; Mini stock point and PBLs (ex. FEDEX)*

SMART
Integrated Scenarios

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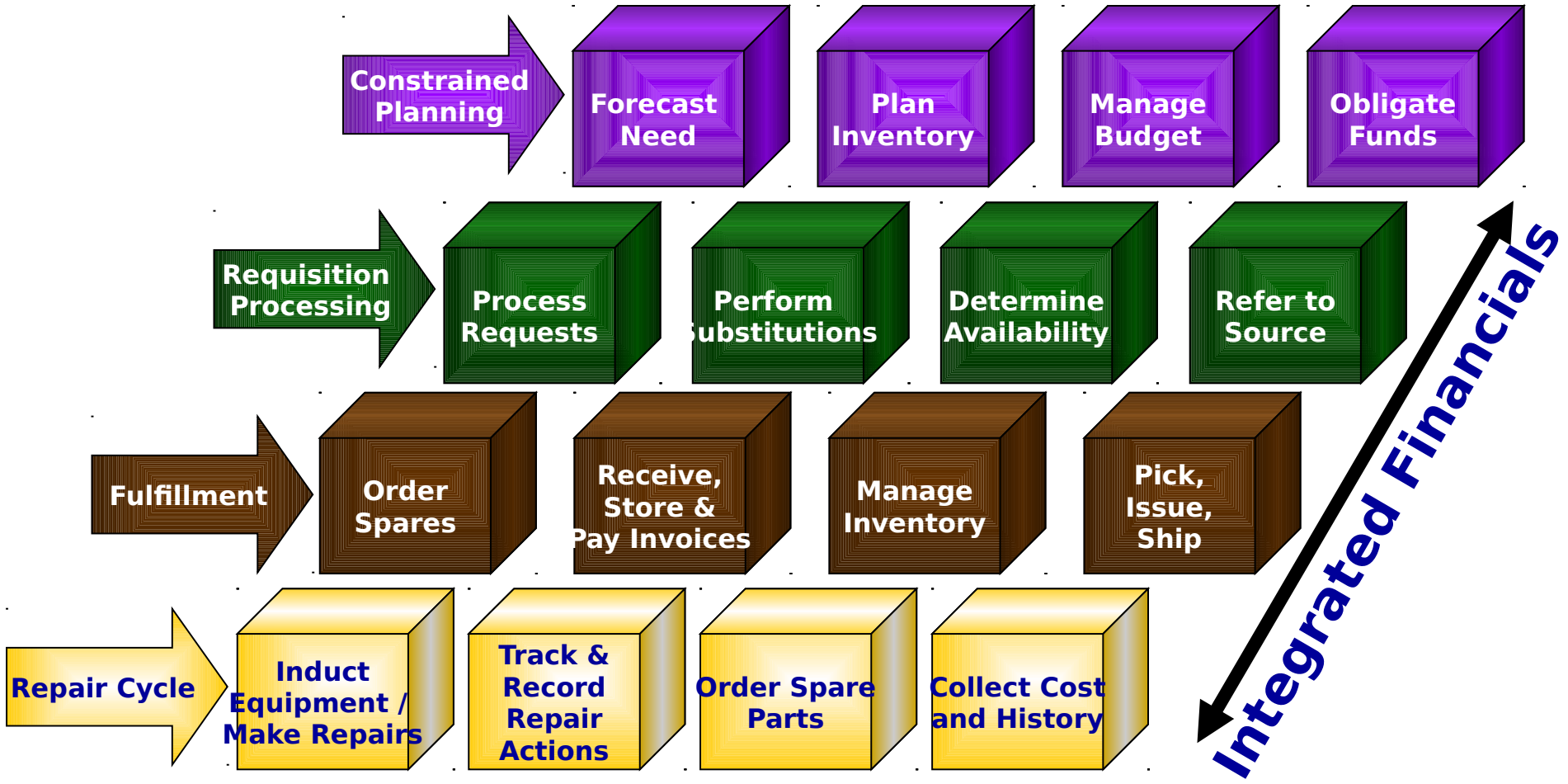
SMART Foundation For Integrated Processes



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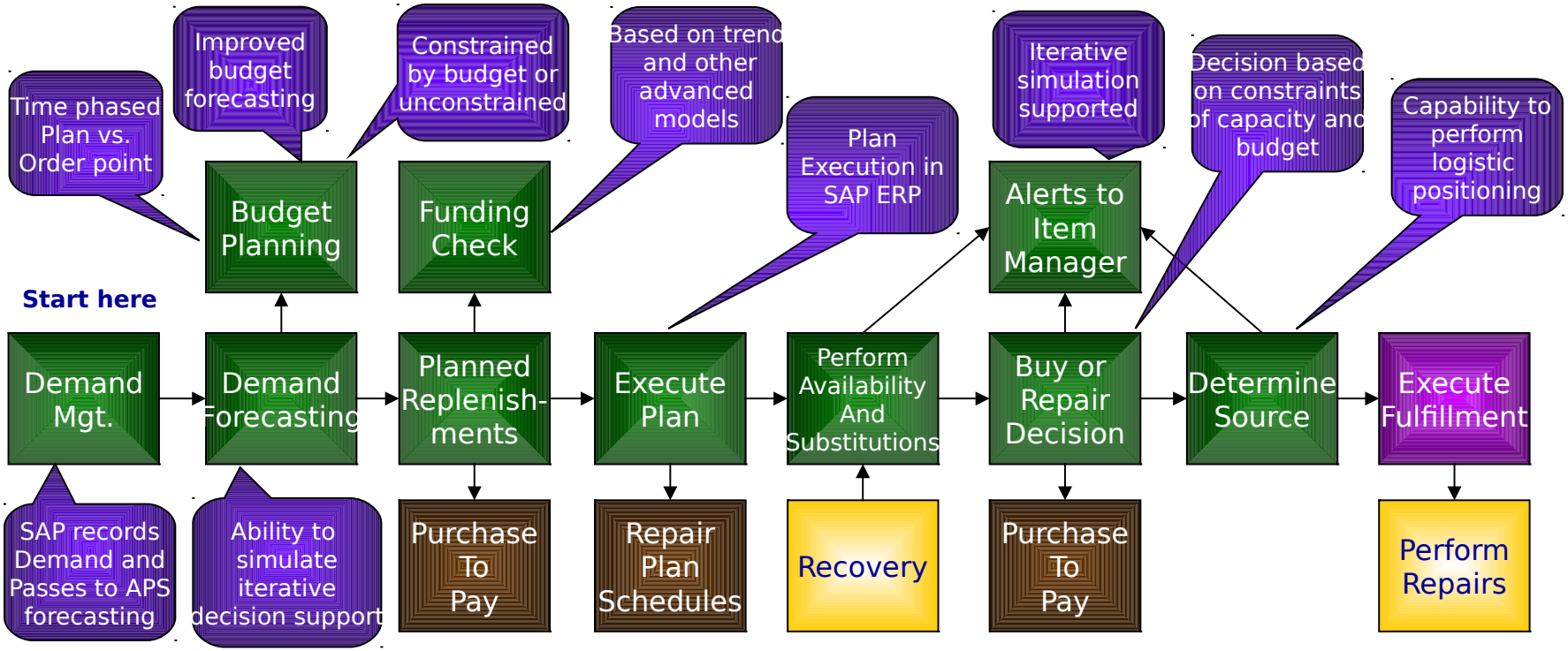
SMART Budget Constrained Planning and Logistics Management



Requisition processing
Fulfillment
Constrained Planning
Repair Cycle

Call outs indicate improvement areas

SAP fully integrated ERP on line transaction processing and execution with Manugistics advanced planning system (APS)

- **Supports the wholesale planning activities of the NAVICP**
  - ***1500 E2C and LM-2500 unique NIINs***
- **Supports the planning of consumables at FISC North Island and RSO Norfolk**
  - ***40,000 NIINs***
  - ***Supports the RSO planning of local repairable at Norfolk and North Island***
- **Major improvement in the ability to perform budget constrained planning and to manage logistics execution based on budget constraints. (Set the plan and execute to it)**

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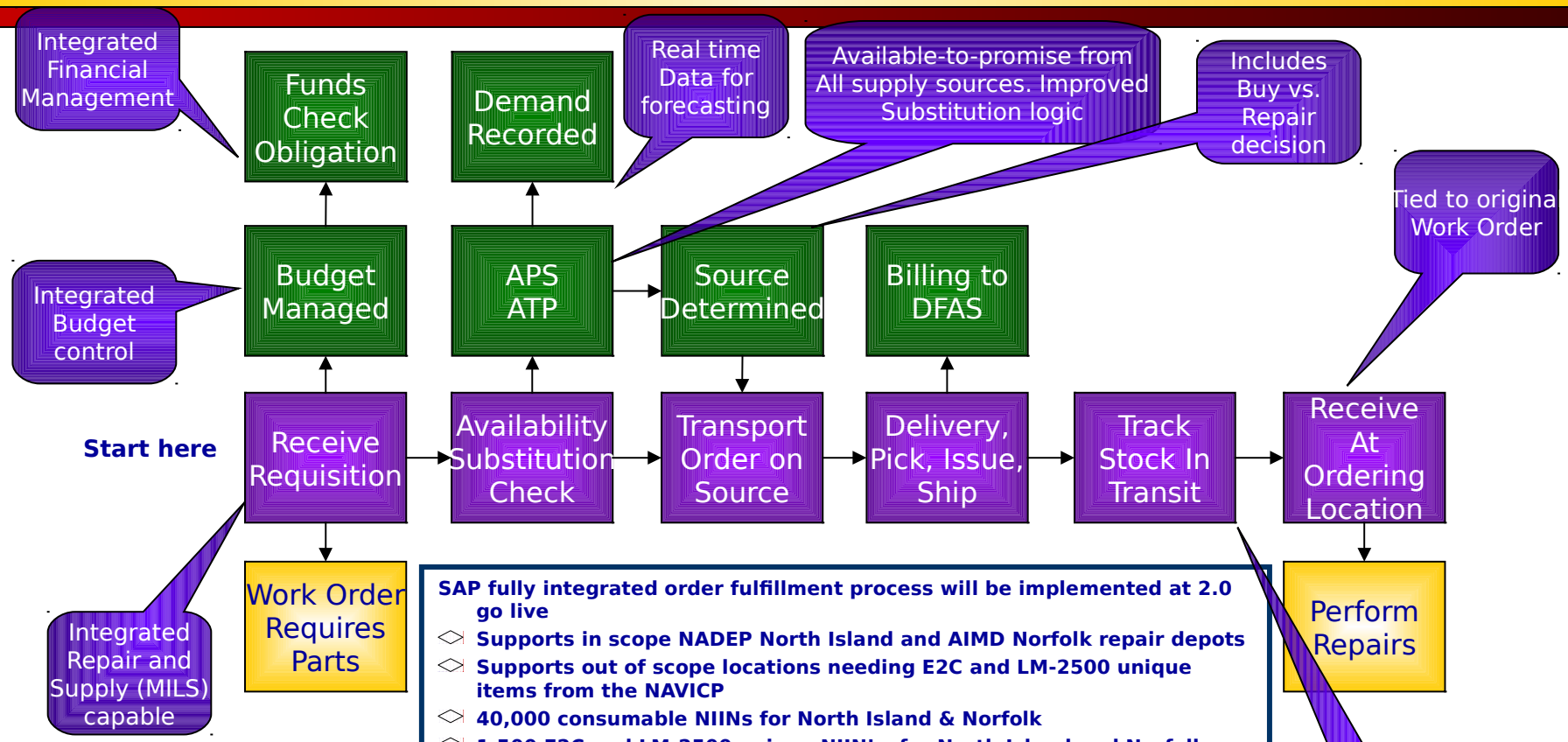
SMART Order Fulfillment



SAP fully integrated order fulfillment process will be implemented at 2.0 go live

- **Supports in scope NADEP North Island and AIMD Norfolk repair depots**
- **Supports out of scope locations needing E2C and LM-2500 unique items from the NAVICP**
- **40,000 consumable NIINs for North Island & Norfolk**
- **1,500 E2C and LM-2500 unique NIIN's for North Island and Norfolk**
  - ***Consumables***
  - ***Repairables***
- **Management of budget and funding obligations for in scope locations**
- **Supply personnel impacted**
  - ***North Island, Norfolk, NAVICP***
  - ***Entire Navy for in scope E2C and LM-2500 unique items***

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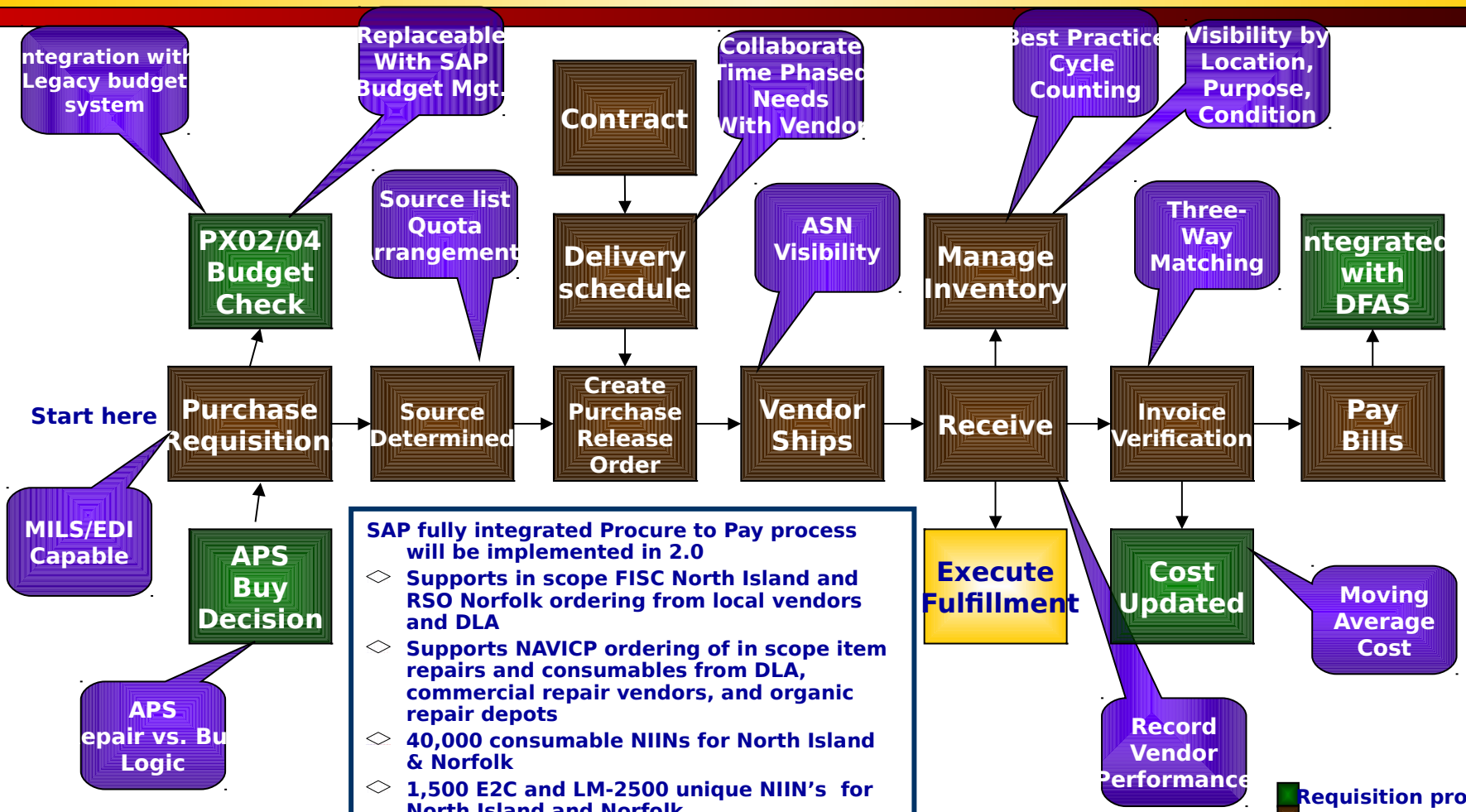
SMART Procure to Pay



SAP fully integrated Procure to Pay process will be implemented in 2.0

- Supports in scope FISC North Island and RSO Norfolk ordering from local vendors and DLA
- Supports NAVICP ordering of in scope item repairs and consumables from DLA, commercial repair vendors, and organic repair depots
- 40,000 consumable NIINs for North Island & Norfolk
- 1,500 E2C and LM-2500 unique NIIN's for North Island and Norfolk
  - *Consumables*
  - *Repairables*

SMART Repair Cycle

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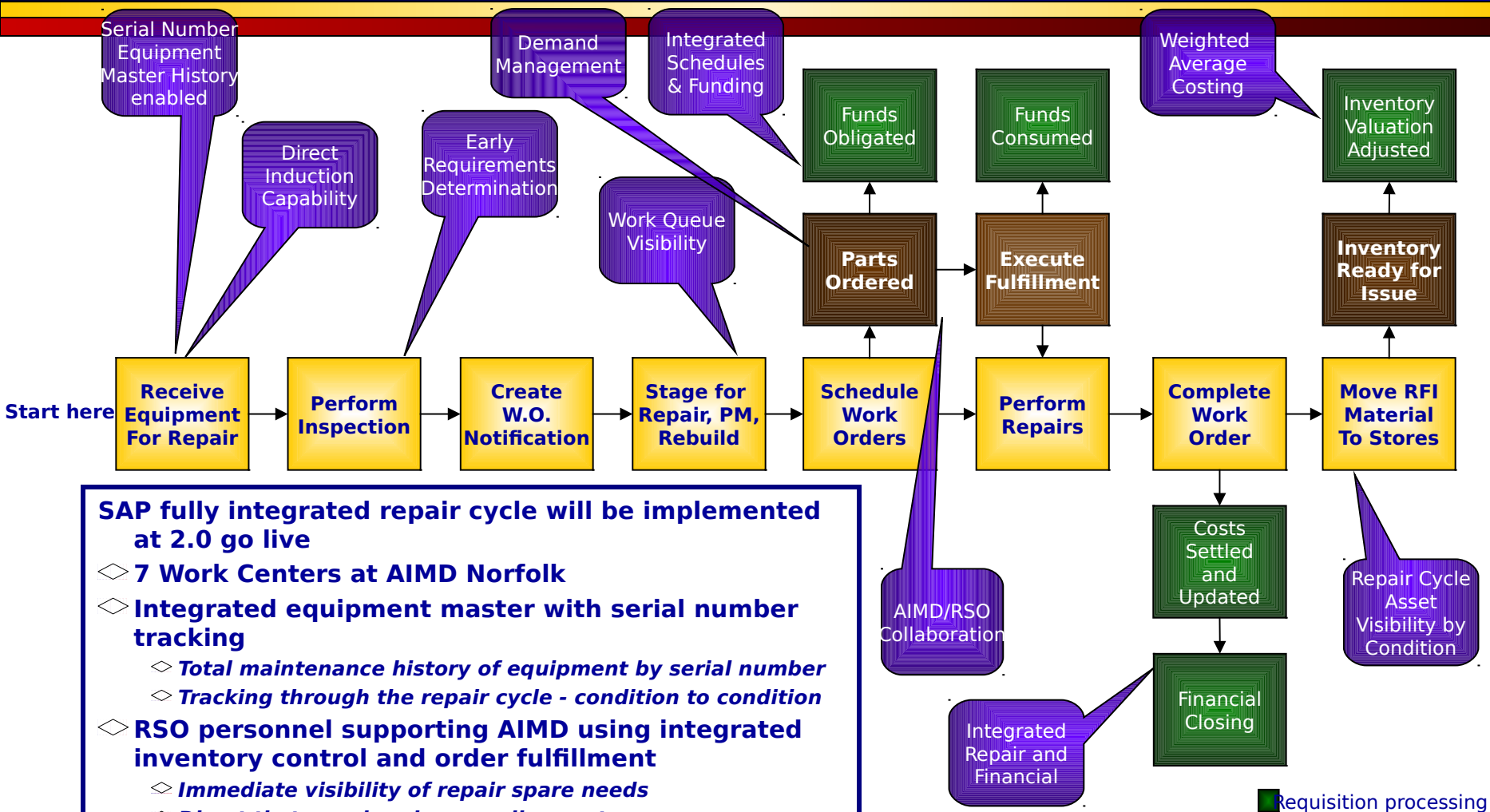

SAP fully integrated repair cycle will be implemented at 2.0 go live

- **7 Work Centers at AIMD Norfolk**
- **Integrated equipment master with serial number tracking**
  - ***Total maintenance history of equipment by serial number***
  - ***Tracking through the repair cycle - condition to condition***
- **RSO personnel supporting AIMD using integrated inventory control and order fulfillment**
  - ***Immediate visibility of repair spare needs***
  - ***Direct tie to work orders needing parts***
  - ***Integrated funds tracking***
  - ***Stock in transit visibility and integrity***

SAP Repair Cycle Demonstration

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SAP Repair Cycle Demonstration

Repair Cycle addresses the repair of a component at the AIMD level. Checks will be performed for funds availability, material availability, interchangeability, and source selection before an order is created to issue a RFI part and move the COND F part to the repair location.

At the repair location, a work order is created, the COND F part is repaired and transferred back to supply as RFI. Financial reports are generated to show repair costs and billing status for this repair.

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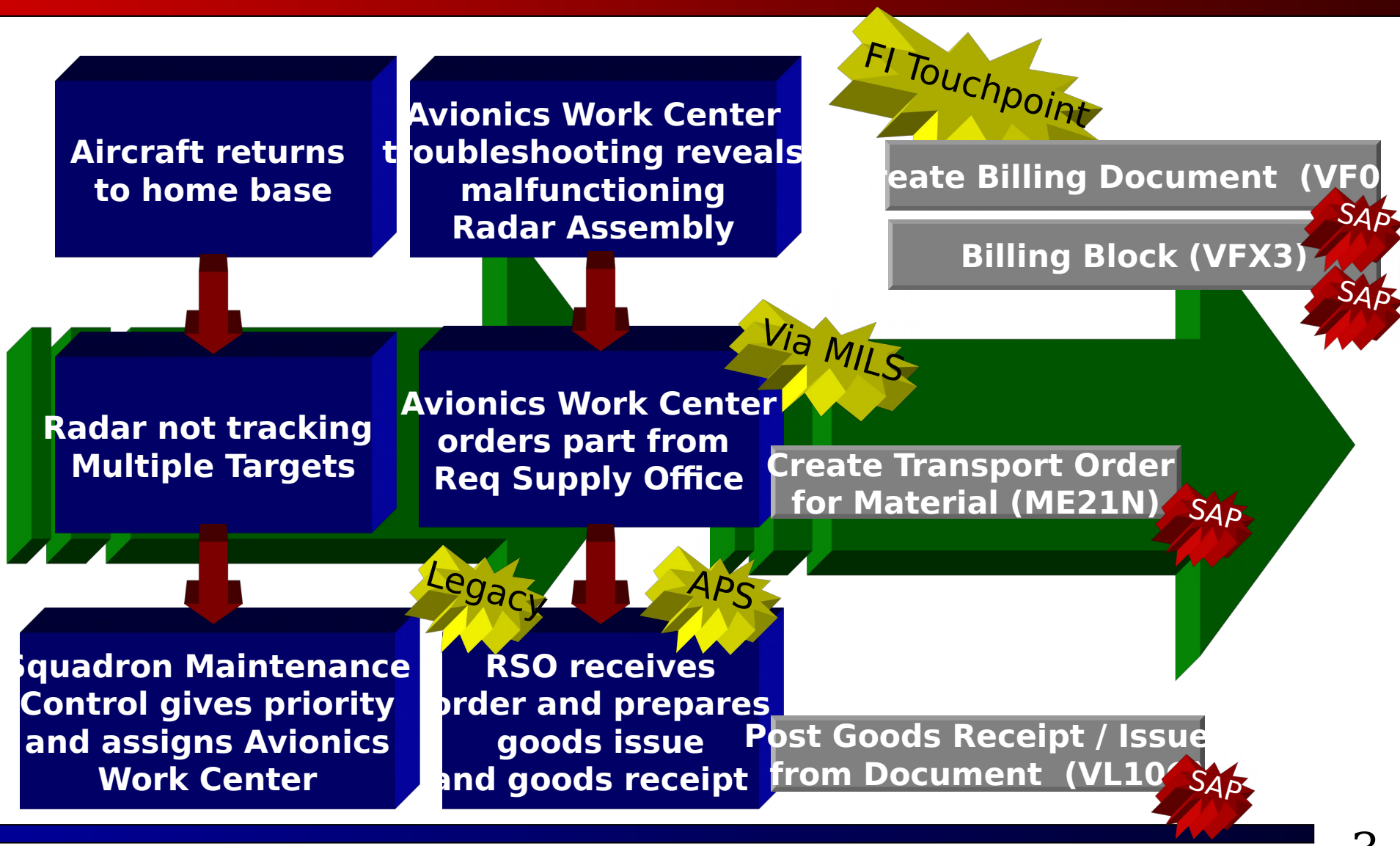
SAP Repair Cycle Demonstration


Aircraft returns to home base
Avionics Work Center troubleshooting reveals malfunctioning Radar Assembly
FI Touchpoint
eate Billing Document (VF0
SAP
Billing Block (VFX3)
SAP
Via MILS
Radar not tracking Multiple Targets
Avionics Work Center orders part from Req Supply Office
Create Transport Order for Material (ME21N)
SAP
Legacy
APS
Squadron Maintenance Control gives priority and assigns Avionics Work Center
RSO receives order and prepares goods issue and goods receipt
Post Goods Receipt / Issue from Document (VL10
SAP

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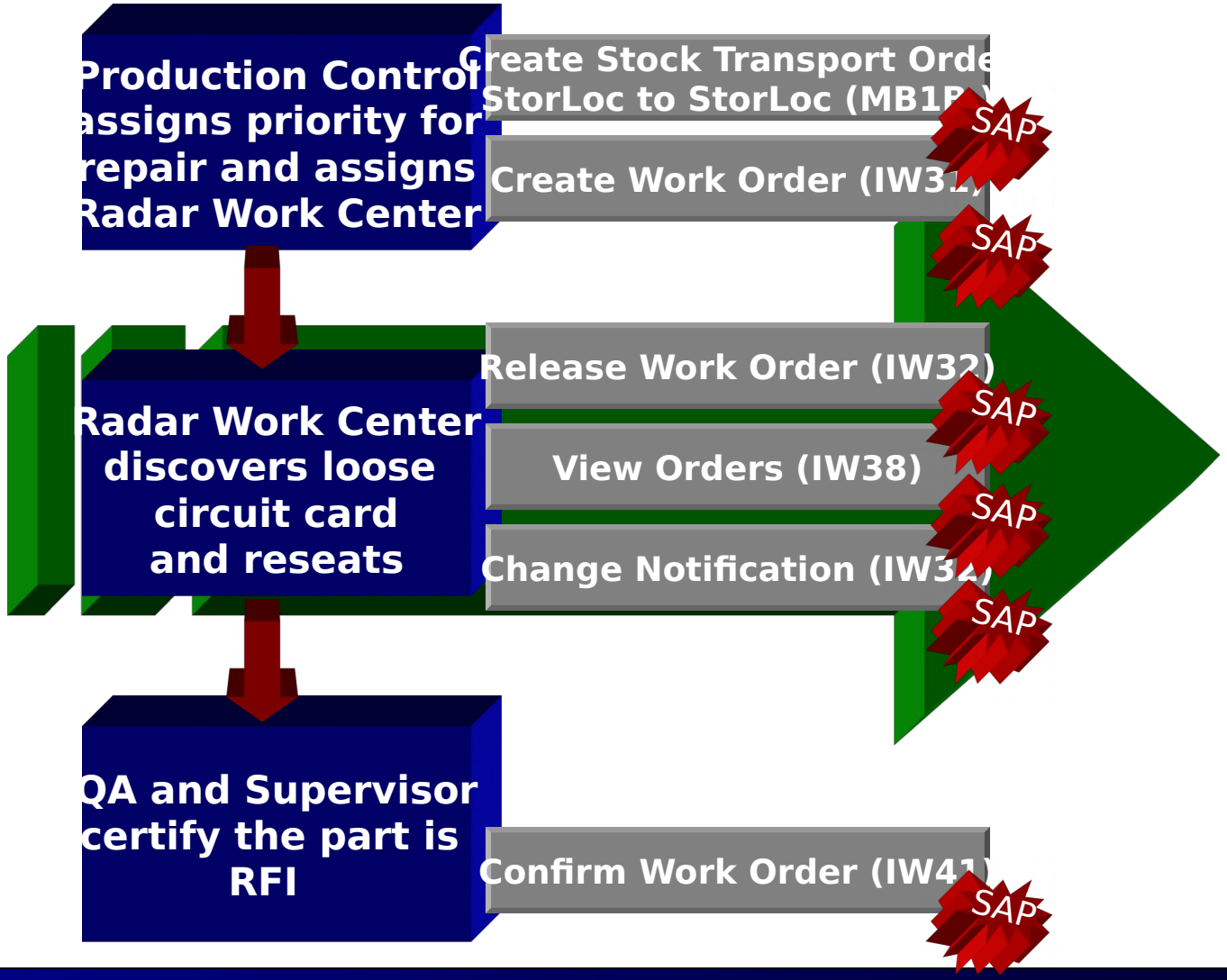
SAP Repair Cycle Demonstration



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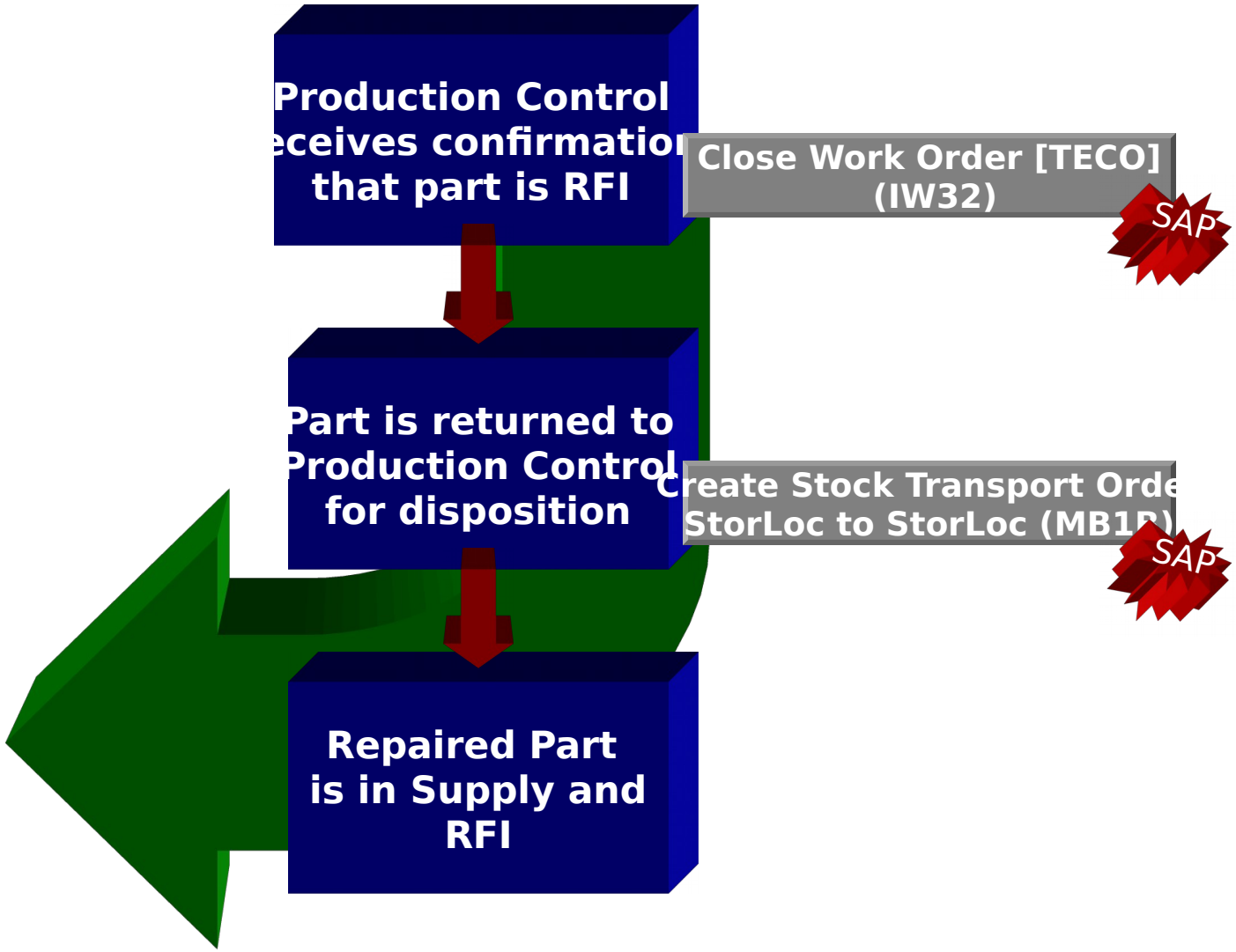
SAP Repair Cycle Demonstration


Production Control eceives confirmatio that part is RFI
Close Work Order [TECO] (IW32)
SAP
Part is returned to Production Control for disposition
Create Stock Transport Orde StorLoc to StorLoc (MB1B)
SAP
Repaired Part is in Supply and RFI

Summary

- **ERP Overview**
  - *Reengineer business processes*
  - *Establish common data and practices*
  - *Establish Single Entry – Single Source*
  - *Reduce number of applications*
  - *Establish End-to-End process connectivity*
  - *Comply with Federal financial standards*
  - *Enable effective implementation of Activity Based Costing (ABC)*
- **Major Terms & Concepts**
- **SMART Integrated Scenarios**
  - *Constrained Planning*
  - *Order Fulfillment*
  - *Procure to Pay*
  - *Repair Cycle*
- **SAP Repair Cycle Demonstration**

Final Questions?